Docket No.

251052US96DIV

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF:

Michael R JOHNSON

FILED:

SERIAL NO: NEW APPLICATION

HEREWITH

FOR:

METHODS OF USING SODIUM CHANNEL BLOCKERS

INFORMATION DISCLOSURE STATEMENT UNDER 37 CFR 1.97

COMMISSIONER FOR PATENTS ALEXANDRIA, VIRGINIA 22313

SIR:

Applicant(s) wish to disclose the following information.

REFERENCES

- The applicant(s) wish to make of record the references listed on the attached Form PTO-1449 from prior U.S. Application Serial No. 10/076,571, filed February 19, 2002. Copies of the listed references are attached, where required, as are either statements of relevancy or any readily available English translations of pertinent portions of any non-English language references.
- A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

RELATED CASES

- Attached is a list of applicant's pending application(s) or issued patent(s) which may be related to the present application. A copy of the patent(s), together with a copy of the claims and drawings of the pending application(s) is attached along with PTO 1449.
- ☐ A check or credit card payment form is attached in the amount required under 37 CFR §1.17(p).

CERTIFICATION

- ☐ Each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this statement.
- □ No item of information contained in this information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the undersigned, having made reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this statement.

DEPOSIT ACCOUNT

Please charge any additional fees for the papers being filed herewith and for which no check or credit card payment is enclosed herewith, or credit any overpayment to deposit account number 15-0030. A duplicate copy of this sheet is enclosed.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C.

James J. Kelly

Registration No. 41,504

Customer Number

22850

Tel. (703) 413-3000 Fax. (703) 413-2220 (OSMMN 05/03) Docket No.

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Form PTO 1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTY DOCKET NO. 251052US96		SERIAL NO. NEW APPLICATION				
LIST OF REFERENCES CITED BY APPLICANT			APPLICANT Michael R. JOHNSON					
Ī			FILING DATE	HEREWITH		GROUP		
				U.S. PATENT DO	CUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	N	IAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
111111111111111111111111111111111111111	AA	4,177,285	12-04-79	Cragoe, Jr. et al.		<u> </u>	CLAGG	II AFFROFRIATE
	AB	3,794,734	02-26-74	Cragoe, Jr. et al.				
	AC	3,864,401	02-04-75	Schultz et al.				
	AD	3,914,253	10-21-75	Cragoe, Jr. et al.				
	AE	3,929,872		Cragoe, Jr. et al.				
	AF	3,931,239	01-06-76	Cragoe, Jr. et al.				
	AG	3,953,476	04-27-76	Cragoe, Jr. et al.				
	AH	3,966,966	06-29-76	Cragoe, Jr. et al.		<u> </u>	<u> </u>	
	Al	4,006,180	02-01-77	Cragoe, Jr. et al.				
	AJ	4,012,524	03-15-77	Cragoe, Jr. et al.	_			
	AK	4,159,279	06-26-79	Smith et al.				
	AL	4,163,781	08-07-79	Cragoe, Jr. et al.	· · · · · · · · · · · · · · · · · · ·			
	AM	4,163,794	08-07-79	Cragoe, Jr. et al.				
	AN	4,085,219	04-18-78	Cragoe, Jr. et al.				
FOREIGN PATENT DOCUMENTS								
		DOCUMENT NUMBER	DATE		COUNTRY		YES	TRANSLATION NO
	AO							
	AP							
	AQ							
	AR							
	AS							
	АТ							
	ΑU							
	AV							
		OTHER REF	ERENCES (Including Author,	, Title, Date, Pertinen	t Pages, e	tc.)	
	AW	R. Tarran et al., The CF 158, July 2001.	Salt Controv	ersy: In Vivo Obs	ervations and Therape	eutic Appro	paches, Mo	olecular Cell, Vol. 8, 149-
	AX	Michael R. Knowles et al., Amiloride in Cystic Fibrosis: Safety, Pharmacokinetics, and Efficacy in the Treatment of Pulmonary Disease, Chapter 20, page 301-316.						
	AY	Louis Simchowitz et al., An Overview of the Structure Activity Relations in the Amiloride Series, Chapter 2, page 9-25.						
	AZ	J.R. Sabater et al., <u>Aerosolization of P2y2-Receptor Agonists Enhances Mucociliary Clearance in Sheep</u> , <i>The American Physiological Society</i> , page 2191-2196.						
Examiner						Date Cor	nsidered	T
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Form PTO 1449 U.S. DEPARTMENT OF COMMERCE (Modified) PATENT AND TRADEMARK OFFICE			ATTY DOCKET NO. SERIAL NO. 251052US96 NEW APPLIC		IO. V APPLICATION		
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				U.S. PATENT DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,025,625	05-24-77	Rooney et al.			
	AB	4,196,292	04-01-80	Woltersdorf, Jr. et al.	-		
	AC	4,087,526	05-02-78	Cragoe, Jr. et al.			
	AD	4,087,542	05-02-78	Cragoe, Jr. et al.			
	ΑE	4,092,414	05-30-78	Cragoe, Jr. et al.			
	AF	4,100,294	07-11-78	Cragoe, Jr. et al.			
	AG	4,105,769	08-08-78	Rooney et al.			
	AH	4,140,776	02-20-79	Cragoe, Jr. et al.			
	Al	4,145,551	03-20-79	Cragoe, Jr. et al.			
	AJ	4,181,727	01-01-80	Cragoe, Jr. et al.			
	AK	4,237,130	12-02-80	Cragoe, Jr. et al.			
	AL	4,237,144	12-02-80	Cragoe, Jr. et al.			
	AM	4,277,602	07-07-81	Woltersdorf et al.			
	AN	4,291,050	09-22-81	Woltersdorf, Jr. et al.			
FOREIGN PATENT DOCUMENTS							
DOCUMENT DATE			COUNTRY		YES	TRANSLATION NO	
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		OTHER REF	ERENCES (Including Author, Title, Date, Pertine	nt Pages, e	etc.)	
	AW	Thomas R. Kleyman et a Biology, Vol. 105, pages		and Its Analogs as Tools in the Study o	of Ion Trans	port, The	lournal of Membrane
	Edward C. Taylor et al., A Facile Route to "Open Chain" Analogues of DDATHF, Heterocycles, Vol. 28, No. 2, 1989.						il. 28, No. 2, 1989.
	Paul-Michael Windscheif et al., <u>Substituted Dipyridlethenes and -ethynes and Key Pyridine Building Blocks</u> , <i>Synthesis</i> , AY pages 87-92, January 1994.						g Blocks, Synthesis,
	AZ Edward J. Cragoe, Jr., <u>The Synthesis of Amiloride and Its Analogs</u> , page 24-38, Chapter 3.						
Examiner					Date Co	nsidered	
*Examiner: In conformance	itial if r and no	eference is considered, wont considered. Include cop	hether or no y of this forn	t citation is in conformance with MPEP (n with next communication to applicant.	609; Draw I	ine through	n citation if not in

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				U.S. PATENT DOCUMENTS			
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,003,927	01-18-77	Woltersdorf, Jr. et al.	1		
	AB	4,296,122	10-20-81	Cragoe, Jr. et al.			
	AC	4,317,822	03-02-82	Woltersdorf, Jr. et al.			
	AD	4,362,724		Bock et al.			
	AE	4,401,669	08-30-83	Cragoe, Jr. et al.			
	AF	3,974,212		Cragoe, Jr. et al.	1		
	AG	3,984,465		Cragoe, Jr. et al.	 		
	AH	3,984,552		Cragoe, Jr. et al.			
	Al	4,067,980		Cragoe, Jr. et al.	†		
	AJ	4,085,117		Cragoe, Jr. et al.	<u> </u>		
	AK	4,085,211		Cragoe, Jr. et al.	 		
	AL	4,246,406	01-20-81	· · · · · · · · · · · · · · · · · · ·	ļ		
	AM	3,472,848	10-14-69	Edward J. Cragoe, Jr. et al.	ļ		
	AN	3,544,571		Edward J. Cragoe, Jr., et al.	1		
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		OTHER REF	ERENCES (Including Author, Title, Date, Pertinen	t Pages, e	etc.)	
	AW	Jack H. Li, et al., Stereo Pharmacology and Expe	selective Blo erimental The	ckage of Amphibian Epithelial Sodium C prapeutics, Vol. 267, No. 3, pages 1081-	hannels b 1084, 1993	y Amiloride 3.	Analogs, The Journal of
	AX	Pallav L. Shah, M.D., <u>Chapter 7. Progress in the Treatment of Pulmonary Disease in Cystic Fibrosis</u> , Annual Reports in Medicinal Chemistry, Vol. 36, pages 67-76, 2001.					
		Dieter Worlitzsch et al.,	Effects of Re	educed Mucus Oxygen Concentration in	Airway Pse	eudomonas	s Infections of Cystic
	AY	Fibrosis Patients, The Journal of Clinical Investigation, February 2002, Volume 109, Number 3, pages 317-336.					
	AZ	Edward J. Cragoe, Jr., et al., Chapter 7: Diuretic Agents, Annual Reports in Medicinal Chemistry, 1966, page 59-68.					
Examiner					Date Cor	nsidered	
*Examiner: In	itial if r	eference is considered, w	hether or no	t citation is in conformance with MPEP 6	09; Draw I	ine through	n citation if not in

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EXAMINER		DOCUMENT	DATE	NAME	CLASS	SUB	FILING DATE	
INITIAL	^^	NUMBER				CLASS	IF APPROPRIATE	
 	AA	3,991,106	11-09-76			}		
<u> </u>	AB AC	3,991,087		Cragoe, Jr. et al.				
<u> </u>	AD	3,989,749 3,987,091	10-19-76	Cragoe, Jr. et al.				
<u> </u>	AE	3,979,361		Cragoe, Jr. et al. Schultz et al.	-			
 	AF	3,976,686		Cragoe, Jr. et al.				
<u> </u>	AG	3,976,681		Cragoe, Jr. et al.				
	AH	3,958,004		Cragoe, Jr. et al.				
	Al			<u> </u>				
		3,956,374		Shepard et al.		 		
<u> </u>	AJ	3,928,624		Cragoe, Jr. et al.		ļ		
	AK	3,894,065		Cragoe, Jr. et al.		-		
<u> </u>	AL	3,668,241		Cragoe, Jr. et al.		_		
		3,625,950		Edward J. Cragoe, Jr.		 		
	AN	4,298,743	11-03-81	Cragoe, Jr. et al.		l		
FOREIGN PATENT DOCUMENTS								
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		OTHER REF	ERENCES (Including Author, Title, Date, Perti	nent Pages, e	etc.)		
	AW	Edward J. Cragoe, Jr., et al., Chapter 7: Diuretic Agents, Annual Reports in Medicinal Chemistry, 1965, page 67-77.						
	AX	Robert L. Smith, et al., Chapter 8: Diuretics, Annual Reports in Medicinal Chemistry, Volume 11, pages 71-79, 1976.						
	AY	Robert L. Smith, et al., Chapter 7: Diuretics, Annual Reports in Medicinal Chemistry, Volume 13, pages 61-70, 1978.						
	AZ	Edward J. Cragoe, Jr., Structure-Activity Relationships in the Amiloride Series, Merck Sharp and Dohme Research Laboratories, 1979, pages 1-20.					Dohme Research	
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	AA	3,313,813	04/11/67	Cragoe				
	AB	3,573,306	03/30/71	K.L. Shepared et al.				
	AC							
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	J. B. BICKING, et al., J. Med. Chem., vol. 8, no. 5, pp. 638-642, "PYRAZINE DIURETICS. I. N-AMIDINO-3-6-AW HALOPYRAZINECARBOXAMIDES", 1965.							
	R. F. EPAND, et al., British Journal of Cancer, vol. 63, no. 2, pp. 247-251, "REVERSAL OF INTRINSIC MULTIDRUG AX RESISTANCE IN CHINESE HAMSTER OVARY CELLS BY AMILORIDE ANALOGS", 1991.						NSIC MULTIDRUG	
	T. M. COCKS, et al., British Journal of Pharmacology, vol. 95, no. 1, pp. 67-76, 1988.							
	T. R. KLEYMAN, et al., American Journal of Physiology, vol. 260, no. 2, Pt. 1, pp. C271-C276, 1991.					91.		
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